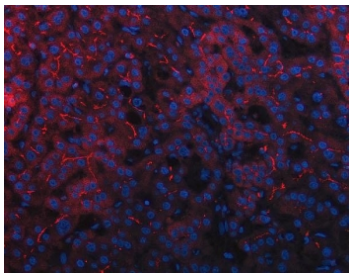
DEP1 Antibody / Density-enhanced phosphatase 1 / PTPRJ (RQ7321)

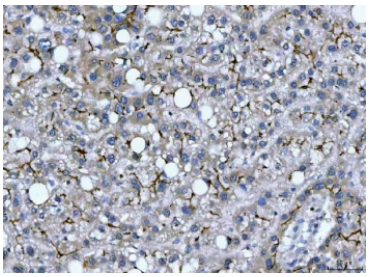
Catalog No.	Formulation	Size
RQ7321	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

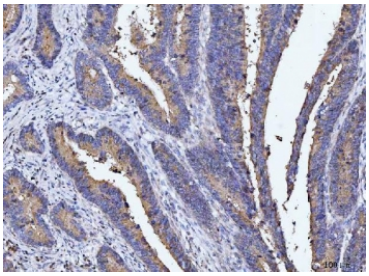
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q12913
Localization	Cell membrane, cell junction
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This DEP1 antibody is available for research use only.



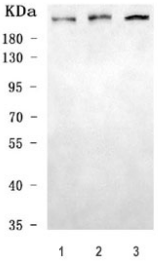
Immunofluorescent staining of FFPE human liver cancer tissue with DEP1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



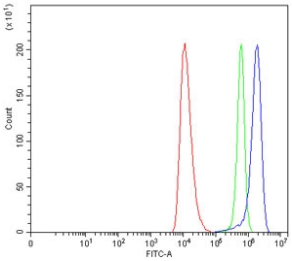
IHC staining of FFPE human liver cancer tissue with DEP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human rectal cancer tissue with DEP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HeLa, 2) human A549 and 3) rat brain tissue lysate with DEP1 antibody. Predicted molecular weight ~146 kDa but observed at up to ~250 kDa due to glycosylation.



Flow cytometry testing of human HEL cells with DEP1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= DEP1 antibody.

Description

Receptor-type tyrosine-protein phosphatase eta, also called Density-enhanced phosphatase 1 (DEP1) and CD148, is an enzyme that in humans is encoded by the PTPRJ gene. The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes, including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region containing five fibronectin type III repeats, a single transmembrane region, and a single intracytoplasmic catalytic domain, and thus represents a receptor-type PTP. This protein is present in all hematopoietic lineages, and was shown to negatively regulate T cell receptor signaling possibly through interfering with the phosphorylation of Phospholipase C Gamma 1 and Linker for Activation of T Cells. This protein can also dephosphorylate the PDGF beta receptor, and may be involved in UV-induced signal transduction. Multiple transcript variants encoding different isoforms have been found for this gene.

Application Notes

Optimal dilution of the DEP1 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids D143-E891) was used as the immunogen for the DEP1 antibody.

Storage

After reconstitution, the DEP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.